

DAV PUBLIC SCHOOLS, ODISHA, ZONE II

**QUESTION BANK**

CLASS XI , Biology(044)

HALF YEARLY EXAMINATION (2015-16)

Diversity In Living organisms

VSA-1

1. What does ICZN stand for?
2. Name the group of monerans which lacks cell wall
3. Name the alga which is used as food supplement by space traveller?
4. Write examples of two species each belong to same genus?
5. Where do you find the following and write their functions :
  - a. Flame Cells,
  - b. Comb Plates
6. Mention 2 modifications in reptiles required for terrestrial mode of life?
7. Who proposed Binomial Nomenclature?
8. What is chemotaxonomy?
9. What maintains cell shape in *Euglena* ?
- 10 Name a virus that has single stranded RNA as genetic material .

SA-1(2 marks)

- 11 What is Coelom? What are various categories of animals based on it? Give diagrammatic sectional view for all the categories.
12. Why do cartilaginous fishes have to swim constantly in water?
13. Identify the phylum for the following animal species
  - a) *Limulus* (king crab)
  - b) *Hirudinaria* (leech)
  - c) *Labeo* (Rohu)
  - d) *Loligo* (Squid)
14. Why are bryophytes called the amphibians of plant kingdom?
15. What are the cells that make the leaves curl in plants during water stress?
16. What is mesosome in Prokaryotic cell? Mention the function that it performs.
- 17 Give the scientific terms for the following
  - a. The fungal component of Lichen
  - b. Fusion of two nuclei
  - c. Form of stored food in Rhodophyceae
  - d. Virus that infect bacteria
18. Answer the following in one word
  - a. Association of roots of *Cycas* with algae
  - b. The body cavity of sponges
  - c. The female gametophyte in the ovule of Angiosperms
  - d. Sporophytic stage of mosses
19. Differentiate between endarch and exarch type of xylem.
- 20 Draw well labeled diagram of an *Euglena* .

SA-II (3 marks)

21 Complete the table given below

Classes	Common Name	Major pigments	Stored food
Chlorophyceae	Green Algae	?	?
?	Brown Algae	Chlorophyll a,c and Fucoxanthin	?
Rhodophyceae	?	Chlorophyll a,d and Phycoerythrin.	?

22. Define the followings
  - a) Notochord
  - b) Homeotherms
  - c) Mycorrhizae
23. Write the functions of the followings
  - a) Nephridia
  - b) Cnidoblast
  - c) Malpighian tubules
24. Give an example of the following
  - a. Round worm
  - b. Fish possessing sting
  - c. Free floating form of cnidaria
  - d. A limbless reptile
  - e. Locomotory organs of octopus
  - f. Stinging organs of jelly fish.
25. a) How are viroids different from viruses ?  
 b) What is an atrichous bacterial cell?  
 c) Why are the members of Deuteromycetes called imperfect fungi?
26. Explain all vertebrates are chordates but all chordates are not vertebrates.
27. What are the modifications that are observed in birds that help them fly? (Six points).
28. Define the following terms
  - a. Algal bloom
  - b. Red tide
  - c. Dikaryophase

#### LA (5Marks)

29. Who introduced five kingdom classifications? What are the basis of this classification?  
 Name the phylums and three important characteristics of each phylum.
30. Write a short note on reproduction in fungi.
31. What is alternation of generation? Describe briefly the life cycle of an angiospermic plant.
- 32 To which kingdom protozoans belong. Name different groups of protozoan and two examples of each.

#### UNIT -2 Structural organization In Plants & Animals

##### VSA-(1Marks)

1. What is meant by Mosaic vision?
2. What are Epigynous flowers?
3. What is the function of lenticels in plants?
4. Which part of ginger and onion are edible?
5. In swampy areas like the Sunderban in West Bengal, plants bear special types of root called?
- 6 Mention two sites in human body where cartilage is present .
- 7 What are ootheca ?

##### SA I -(2Marks)

8. Differentiate between endarch and exarch type of xylem.
9. What is the function of phloem parenchyma?
10. Draw well labeled diagram of a maize grain .
11. Where do you find aleurone layer? Write its composition
- 12 . Write four differences between T.S of dicot stem and monocot stem
13. Annual rings seen in a cut stem give an estimate of the age of the tree". Justify.
14. Give a brief account of Sap wood and Heart wood found in trees.
15. Where are sclerites present in cockroach?
16. Write two differences between male and female cockroach

##### SA-(3 Marks)

17. Explain with suitable examples of the different types of phyllotaxy?
18. Give the scientific terms for the following
  - a. Petals attached to stamen
  - b. Fused carpels
  - c. Superior ovary



SA-II(3 Mar5ks)

15. Draw diagram showing (9+2) arrangement of centriole.
16. Name two Semiautonomous organelles & give reason.
17. Write a brief account on competitive inhibition. Explain with suitable examples.
18. Name the two main constituents of the plasma membrane and show how are they arranged with the help of a diagram.
19. Distinguish between –
  - a. 70S and 80S ribosomes
  - b. Food vacuole and contractile vacuole
  - c. Glycoprotein and Lipoprotein
20. What are the different types of plastids? Write function of each type.
21. Explain the different phases of interphase of cell cycle.
22. Distinguish between –
  - a. Co-factor and Co-enzyme
  - b. Name the group of enzyme that catalyze inter conversion of optical, geometrical or positional isomers.
23. Differentiate primary metabolites and secondary metabolites. Give an example of each.
24. What are leucoplasts? What do the following leucoplasts store?
  - (a) Amyloplasts. (b) Elaioplasts. (c) Aleuroplasts.
25. What is a centromere? Classify the chromosome on the basis of position of centromere with the help of diagrams.

LA-(5Marks).

26. a) Write the salient feature of double helical model of DNA.
  - b) Who proposed this model?
27. a) Describe the different structures of protein, give one example from each.
  - b) Write the type of bond that link aminoacids to form protein.
28. (i) Write the characteristics of Metaphase of Mitosis. Draw a labeled diagram.
  - (ii) Write four significance of Mitosis.
29. (i) Distinguish anaphase of Mitosis from Anaphase – I of Meiosis.
  - (ii) What is crossing over? When does it take place?
  - (iii) What is the significance of meiosis
30. What are the various stages of meiotic prophase-I. Enumerate the chromosomes events during each stage?
31. What are macromolecules? Give examples. Illustrate the glycoside bond and peptide bond
32. Explain primary cell wall, secondary cell wall and middle lamella.
33. Explain each of the following terms
  - (a) Synoptonemal complex.
  - (b) Chiasmata
  - (c) Quescent stage of cell cycle.
  - (d) Acrocentric chromosome.
  - (e) Mesosome.
34. a) Write the structural formula of
  - a) Adenine b) Uracil c) Adenosine
  - b) Differentiate between Nucleoside and Nucleotide.
35. a. Why is meiosis called reductional cell division?
  - b. Name the stage of cell division where the following events occur.
    - (i) Chromosomes move to spindle equator
    - (ii) Centromere splits and chromatids separate
    - (iii) Crossing over between homologous chromosome
    - (iv) Terminalisation of chiasmata

